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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,255	08/10/2001	John B. Abjanic	42390P8759X	5544

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EXAMINER

WALSH, JOHN B

ART UNIT	PAPER NUMBER
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2151

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/927,255

Applicant(s)

ABJANIC ET AL.

Examiner

John B. Walsh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE of 8/2/2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-28 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,226,675 to Meltzer et al.

Meltzer et al. '675 discloses a document object generator to receive transaction information of a message (1300) and create a document object from said transaction information (1301); a pattern object generator to receive pattern information of a pattern and create a pattern object from said pattern information (1307; column 3, lines 34-36); a pattern parser (1302, 1403) to parse the pattern information for one or more elements according to a predefined pattern object data structure and to place said elements in appropriate blocks within said pattern object data structure (1302,1303; column 3, lines 33-36); and a content based switching decision logic to compare said document object with said pattern object, and to make a switching decision for a message based upon said comparison (1309, 1312; column 4, lines 54-55).

As concerns claim 2, further comprising an output interface to receive a message from a network and to receive said switching decision from said content based switching decision logic; said output interface to route or switch the received message to one of a plurality of processing nodes to process said message based upon said switching decision (1305,1306,1312).

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As concerns claim 3, wherein said processing nodes comprise servers to process said messages (abstract).

As concerns claim 4, wherein said content based switching logic compares said document object with said pattern object using a pattern matching algorithm (column 2, lines 57-64; column 3, lines 41-45; column 4, lines 4-17).

As concerns claim 5, wherein said pattern object contains at least one expression, and said pattern matching algorithm evaluates said at least one expression for a match with said document object (column 10; lines 51-53).

As concerns claim 6, wherein the output interface translates a destination address and port number of the message to the destination address and port number of the one of the processing nodes that will process the message (1306,1312).

As concerns claims 7, 18, 24 and 28, wherein said document object represents a logical tree of said transaction information (column 79, lines 7-8; retrieval of information for comparison).

As concerns claims 8 and 19, wherein said logical tree contains links to a child, with said child having links to its siblings (information which is linked with pointers; column 4, line 28).

As concerns claims 9 and 20, wherein said logical tree is represented as a plurality of entries in a document object table (specification has a plurality of entries).

As concerns claims 10, 21, 24 and 28, wherein said pattern object comprises at least one sub-expression, with said sub-expression represented by an expression object (parsed into objects with one as a sub-expression).

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As concerns claims 11 and 22, wherein said expression object comprises an expression type and expression data (parsed into a type and data).

As concerns claim 12, wherein said transaction information and said pattern information represent XML information (abstract).

As concerns claim 13, a method comprising receiving a message having application data with transaction information (1300); creating a document object using said transaction information (1301); receiving a pattern object representing pattern information (1307; column 3, lines 34-36); parsing the pattern information for one or more elements according to a predefined pattern object data structure (1302); placing said elements in appropriate blocks with said pattern object data structure (1302,1303); comparing said document object with said pattern object (1309); and directing said message to one of a plurality of processing nodes in accordance with said comparison (1312; abstract; figure 13).

As concerns claim 14, wherein said receiving said pattern object comprises receiving said pattern information, and creating a pattern object using said pattern information (1307).

As concerns claim 15, wherein said receiving said pattern object comprises retrieving said pattern object from memory (inherent to have data in memory).

As concerns claim 16, wherein said comparing comprises comparing one or more data characters and one or more markup characters describing the data characters in the application data to similar information provided in the pattern information (figure 13; abstract).

As concerns claim 17, wherein said transaction information comprises business transaction information that is provided in a XML based language (abstract).

As concerns claim 23, a method of XML based switching, comprising: receiving a XML message; the message including business transaction information provided in a XML based language; creating a document object using said business transaction information; comparing said document object to one or more pattern objects representing pattern information; and directing said XML message to one of a plurality of processing nodes or application servers in accordance with said comparison (figure 13; abstract); wherein said pattern information is parsed for one of more elements according to a predefined pattern object data structure (1302), and said elements are placed in appropriate blocks with said pattern object data structure (1302,1303).

As concerns claim 25, an article comprising a storage medium (server); said storage medium including stored instructions that, when executed by a processor (inherent), result in receiving a message having application data with transaction information; creating a document object using said transaction information; receiving a pattern object representing pattern information, parsing the pattern information for one or more elements according to a predefined pattern object data structure, placing said elements in appropriate blocks within said pattern object data structure (1302,1303); comparing said document object with said pattern object; and directing said message to one of a plurality of processing nodes in accordance with said comparison (figure 13; abstract).

As concerns claim 26, wherein the stored instructions, when executed by a processor, further result in comparing by comparing one or more data characters and one or more markup characters describing the data characters in the application data to similar information provided in the pattern information (figure 13).

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As concerns claim 27, an article comprising a storage medium (server); said storage medium including stored instructions that, when executed by a processor, result in receiving a XML message; the message including business transaction information provided in a XML based language; creating a document object using said business transaction information, comparing said document object to one or more pattern objects representing pattern information, parsing the pattern information for one or more elements according to a predefined pattern object data structure, placing said elements in appropriate blocks within said pattern object data structure (1302,1303); and directing said XML message to one of a plurality of processing nodes or application servers in accordance with said comparison (abstract; figure 13).

Response to Arguments

3. Applicant's arguments filed August 2, 2005 have been fully considered but they are not persuasive.

1) The applicant argues that Meltzer does not disclose content based switching. Meltzer discloses in figures 13 and 14 (column 78, line 61- column 79, line 34) receiving a message (step 1300), creating a document object (1301,1302,1303), pattern information (1307; information stored in a repository), a parser (1403, stored information is parsed) and content based switching (1309 and 1312). Also figure 12, step 1200- an input document is received (column 78, line 46), wherein transaction information of a message is received; steps 1201 and 1202 (column 78, line 50) a document object is created, step 1204, (column 78, lines 50-55), wherein "the content of the document are identified" and at step 1205 they are passed to the identified service. Column 5, lines 22-30 recites "reference to a document type in a repository" wherein comparisons can be

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made between an incoming document and a document in a repository for the purpose of switching based on its content (steps 1204 & 1205).

2) The applicant argues that Meltzer does not disclose parsing at least two documents. However the claim does not recite parsing at least two documents. Claim 1, recites "a pattern parser to parse the pattern information for one or more elements". Therefore only one element can satisfy the claim limitation and the claim does not recite parsing a document, only pattern information, which refers to the pattern object.

3) The applicant argues that Meltzer does not disclose a) pattern information parsed into a pattern object data structure or b) transaction information of a message (a message is received at the network interface, step 1300; document content is equivalent to transaction information) and create a document object from said transaction information (column 78, line 50; wherein an object is created to be used).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

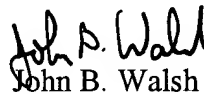
USPN 6,091,724 discloses content based switching.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Walsh whose telephone number is 571-272-7063. The examiner can normally be reached on Monday-Wednesday from 5:30-4:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John B. Walsh
Primary Examiner
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